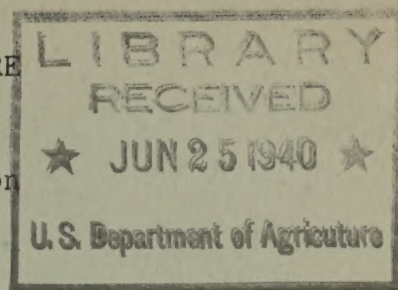


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UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics
In Cooperation with the
Colorado Agricultural Experiment Station



THE PEOPLE OF DOLORES COUNTY, COLORADO

Preliminary Report

Amarillo, Texas
March, 1940

FOREWORD

Widespread drought conditions since 1930 have stimulated the migration of large numbers of people out of some areas of the county and into others. As a consequence many problems have been created, both for the areas from which the migrants come and those to which they have gone. In order to throw some light on the nature and extent of this population movement, the characteristics of the migrants, and the types of adjustment that are being made, five counties in Colorado were selected for intensive study. County superintendents of schools, officials of local school districts, the Federal Bureau of Agricultural Economics, the rural research section of the Works Progress Administration, and the Colorado Agricultural Experiment Station participated in the study, with the collaboration of the State Agricultural Extension Service. The State Superintendent of Public Instruction agreed to permit the survey to be carried out in cooperation with the annual school census in those instances in which local officials were willing.

Dolores County was selected as one of the five to be studied because it was reported to have had a heavy inflow of population since 1930. A complete population enumeration was made as of April 10, 1939 through the cooperation of Mrs. Gladys Bishop, county superintendent of schools, and the school census enumerators in each district. All actual enumeration was done by local citizens in every district except one of the largest. These enumerators were: District 1, Mrs. Isabell Kline; District 2, Neil Bankston; District 3, Mrs. Sarah Belcher; District 4, F. A. Sitten; District 5, George Risenhoover; District 6, Mrs. George Whitener; District 7, Mrs. Irma Shutt; District 8, M. H. Selman; District 9, Willard Lovitt; District 10, Mrs. Manda Kirkendall; and District 11, Charles Terrill. Assistance in field work was supplied by Miss Jane Woolley of the Bureau of Agricultural Economics. This preliminary report was prepared by Olaf F. Larson of the Bureau of Agricultural Economics, in consultation with representatives of the cooperating agencies. Clerical assistance was supplied by the National Youth Administration.

THE PEOPLE OF DOLORES COUNTY, COLORADO

The United States Census for 1930 gives the population of Dolores County as 1,412. On the basis of data from the present study it is estimated that the population as of April 10, 1939 had increased to 1,818, a gain of 28.8 percent. The population as shown by the United States Census for past years and the percentage of change between enumerations are indicated in table 1.

Table 1. - Population of Dolores County, 1890-1930

Year	Population	Percent of change from preceding census
1930	1,412	+ 13.6
1920	1,243	+ 93.6
1910	642	- 43.4
1900	1,134	- 24.3
1890	1,498	(County organized in 1881)

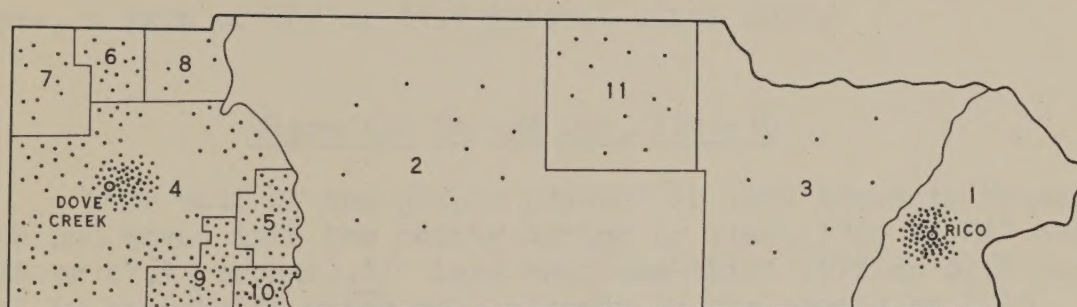
Mining, centered about Rico in the eastern part of the county, was the chief occupation of the workers in the early years of Dolores County. This has been succeeded by agriculture, conducted in the Dove Creek-Cahone district in the western part of the county, as the major means of livelihood. Persons living in households whose heads reported themselves as engaged in agriculture numbered 1,099 in 1939. This figure represents a 16.1 percent increase over the 947 persons living on farms reported by the 1935 Census of Agriculture, and a 46.9 percent gain over the farm population of 748 shown by the United States Census in 1930. According to the former the increase in farm population between 1930 and 1935 was 26.6 percent. Over one-half (53 percent) of the people lived on farms in 1930, but in 1939 three out of five (60.5 percent) lived in agricultural households. The approximate location of the total population in April, 1939 is shown by figure 1; the location of the agricultural population on the same date is shown by the same figure.

Practically all of the population of Precinct I is and has been concentrated in Rico, the county seat--and the county's only incorporated center until the incorporation of Dove Creek in April, 1939. Trends in this precinct's population for the last three census years were as follows:

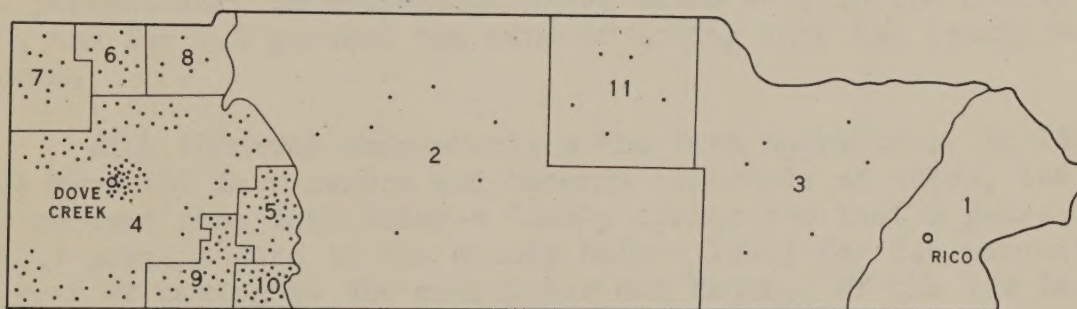
TOTAL POPULATION AND POPULATION IN AGRICULTURAL HOUSEHOLDS, DOLORES COUNTY, COLORADO, ON APRIL 10, 1939

(APPROXIMATE LOCATION WITHIN SCHOOL DISTRICTS)

TOTAL POPULATION



TOTAL POPULATION IN HOUSEHOLDS WHOSE HEADS WERE ENGAGED IN AGRICULTURE



Each dot represents 5 people

Numbers refer to school district numbers

DISTRICT 1 HAS SAME BOUNDARIES AS PRECINCT 1, DISTRICT 3 AS PRECINCT 2, DISTRICTS 2 AND 11 AS PRECINCT 3, DISTRICTS 4, 6, 7, AND 8 AS PRECINCT 4, AND DISTRICTS 5, 9, AND 10 AS PRECINCT 5

FIGURE 1

<u>Year</u>	<u>Population</u>
1930	465
1920	333
1910	397

The population of Precinct I as shown by the April 1939 survey was 373, a loss of 92 persons or nearly 20 percent since 1930.

In 1939 Dove Creek had 324 people in the area included as part of the village, although the entire precinct contained 830 people, a gain of 257 or 44.9 percent since 1930.

Migration In and Out, 1930-39

Over half of the people present in 1939 lived in households which had moved into the county during or since 1930 (1,043 out of 1,818 or 57.4 percent).^{1/} Less than one-third (573 or 31.5 percent) lived in households which were already in the county by 1930. For 202 persons, or 11.1 percent, the date of coming into the county was not learned.

Of the persons living in households whose heads were in agriculture, 59 percent moved into the county during or since 1930.^{2/} 35.1 percent were in households whose heads were in the county before 1930, and for 5.9 percent the date of moving into the county was unknown.

High turnover characterizes the farm operators. In 1939 there were 253 farm owners and tenants reported; of these, 136 or 53.8 percent came into Dolores County during the last 9 years; 103 or 40.7 percent were in the county before 1930; for 5.5 percent the year of moving to the county was not known. Of the 194 farm operators reported by the 1930 Census, 91 or 46.9 percent were no longer operating farms in Dolores county in 1939. The 1935 Census of Agriculture showed 257 farm operators, of which 80 or 31.1 percent were apparently not on farms in the county by 1939.

Not only has there been a heavy inward migration since 1930, but there has also been a heavy outward flow of people. Between

^{1/} About 80 of these 1,043 persons lived in households which had lived in the county in 1930 or after, but had left and returned again before April 10, 1939.

^{2/} About 48 persons lived in households which had lived in the county in 1930 or after, but had left and returned again before April 10, 1939.

one-half and two-thirds of the people in Dolores County in 1930 had either moved out or died by 1939, and it is certain that migration must have accounted for most of the loss.

If it is assumed that all persons present in 1939 whose date of moving to the county was unknown were also present in 1930, then 54.8 percent of the 1930 population would have been lost by 1939. If it is assumed that the persons whose date of move was unknown all came into the county since 1930, then 66.6 percent of the population of 1930 moved out of the county or died by 1939. In making these estimates, births during the last 9 years were considered, but the small number of people present in 1930 who had moved out and then back again by 1939 were included among the newcomers.

Although the classifications for the two years are not strictly comparable, it may be estimated that between 51.1 and 58.2 percent of the 748 farm people present in 1930 had been lost to the county by 1939 through migration or death, but chiefly by migration.

Characteristics of People Present in 1939

Occupation. - The heads of 264 of the 488 households enumerated reported agriculture as their occupation. The nonagricultural households were distributed as follows: Unemployed, W.P.A., and C.C.C., 45; mining, 45; not reported, 38; public employees, 16; merchants, 14; all others, 68. These occupational classifications are of limited value because a person may have two jobs or may shift from one type of work to another several times during the year; the occupation listed was that reported to the census enumerator.

Household size. - Households of farm owners averaged 4 persons; of farm tenants, 4.8 persons; of farm laborers, 4.2 persons; and of all other occupations, 3.2 persons. For the entire population the average household size was 3.7 persons. The number of households in 1939 was a 25.1 percent gain over the 390 reported in 1930; the average size changed only from 3.6 to 3.7 persons. Family information is summarized in table 2.

Sex ratios. - The ratio of men to women has changed relatively little during the last 9 years, being 121 males per 100 females in 1930 and 119 in 1939. An excess of males is characteristic of agricultural and mining communities and of newly developed areas.

Table 2. - Households in Dolores County in 1939 classified by occupation of head and average size

Occupation of head:	: Number of households :	Number of persons in households :	Average size :
All occupations	488	1818	3.7
Farm owner	196	781	4.0
Farm tenant	57	272	4.8
Farm laborer	11	46	4.2
All others	224	719	3.2

Age. - The age composition of the population is important as a means of showing the relation of dependents, both young and old, to the persons at the age of productive work. One out of every three persons (34.5 percent) was found to be under 15 years of age in 1939. About one out of 25, (4.1 percent) was aged 65 and over. One-third of the population were males aged 15-64 -- the chief source of gainful workers. Persons in what is often called the "youth" group, aged 15-24, made up 18.5 percent of the total. As compared with the age distribution in 1930 there has been an increase of 2.9 in the percentage of children under 15, an increase of 1.7 in the percentage of youth, a decrease of 3.2 in the percentage of males of working age, and a slight decrease of 0.4 in the percentage of aged persons.

The proportion of males and females of the different age groups is compared for 1930 and 1939 in table 3.

Table 3. - Percentage distribution of population of Dolores County by age and sex, 1930 and 1939

Age groups :	Males		Females		Total	
	1930	1939	1930	1939	1930	1939
Under 5	6.3	6.4	5.4	5.5	11.7	11.9
5 to 14	8.9	11.7	11.0	10.9	19.9	22.6
15 to 24	8.6	9.8	8.2	8.7	16.8	18.5
25 to 34	8.1	7.7	6.9	7.6	15.0	15.3
35 to 44	8.1	6.2	5.4	5.0	13.5	11.2
45 to 64	11.9	9.8	6.7	6.6	18.6	16.4
65 and over	2.8	2.5	1.7	1.6	4.5	4.1
Total	54.7	54.1	45.3	45.9	100.0	100.0

Variations exist in the age composition of the major occupational groups. Combining all nonagricultural occupations into one group, considering farm owners and tenants separately because they have some significant differences, and eliminating farm laborers from the comparison because of their small number, it was found that the farm tenants had the highest proportion of children and youth and the smallest proportion of old folks. The nonagricultural population had the most old people and fewest youth. No other significant differences among the three groups were found. The percentage distributions are summarized in table 4.

Table 4. - Percentage distribution of the 1939 Dolores County population ^{1/} by age, sex and occupation

Age groups	Sex and occupation								
	Males			Females			Total		
	Owner	Tenant	Nonagri-cultural	Owner	Tenant	Nonagri-cultural	Owner	Tenant	Nonagri-cultural
Under 5	6.3	6.5	5.9	3.7	8.9	6.2	10.0	15.4	12.1
5 - 14	12.6	11.2	11.0	11.1	9.6	11.4	23.7	20.8	22.4
15 - 24	9.5	15.4	7.7	9.5	9.6	7.1	19.0	25.0	14.8
25 - 34	6.3	6.5	9.3	5.5	8.1	9.6	11.8	14.6	18.9
35 - 44	6.7	4.2	6.7	6.6	2.3	4.6	13.3	6.5	11.3
45 - 64	11.1	8.5	3.9	7.4	6.5	6.1	18.5	15.0	15.0
65 & over	2.0	1.9	3.4	1.7	0.8	2.1	3.7	2.7	5.5
Total	54.5	54.2	52.9	45.5	45.8	47.1	100.0	100.0	100.0

^{1/} Farm laborers omitted because of their small number

Fertility. - The ratio of children under 5 years old per 1,000 women of child bearing age is one of the best indications of whether enough babies are being born to bring about an increase in population. In Dolores County there are 557 children under 5 per 1,000 women aged 15-44. Since it requires a ratio of only 370 children per 1,000 women of this age category to maintain a stationary population, it appears that the county is producing 50 percent more children than are necessary to maintain present numbers about steady (not considering migration in and out). Contrary to the usual situation in most parts of the United States, the nonagricultural population in Dolores County has a higher fertility ratio than the agricultural, the ratios being 569 and 549 respectively. The ratio of 549 for the agricultural population is just about the same as the average for the rural farm population of the United States (545) and a little below the Colorado average (557) for the same group.

Migration into Dolores County

As stated in the foreword, the major objectives of this study were to discover the volume of migration into the county, the origin and characteristics of the immigrants, and the type of adjustments which they have been able to make in their new location.

Present occupation. - The 261 households moving into the county during the last 9 years represented 53.5 percent of the total of 488 households in the county in 1939. They contained 1,043 persons, or 57.4 percent of the total population of the county. The proportions of the major occupational groups composed of these recent migrants were as follows: Farm owners, 47.8; farm tenants, 84.2; farm laborers, all; nonagricultural, 54.9. People in agricultural households represented 60.5 percent of the total population but included 62.1 percent of the recent migrants; the nonagricultural population made up 37.9 percent of the migrants and 39.5 percent of the total population.

Year of arrival. - Each year since 1930 has seen new families moving into Dolores County to engage in agriculture. No one year shows a great influx of newcomers who stayed; it must be remembered there is no record of those who came in after 1930 but left before 1939. However, a little over one-half of the migrants who are now owners, less than two-thirds of the tenants, and all but one of the 11 farm laborers came after the beginning of 1935. Unlike the agricultural migrants, a majority of the nonagricultural newcomers (63.2 percent) came during 1937 and 1938. Over half of these came to Rico. Eighteen of the 72 coming during these 2 years were unemployed or were on W.P.A. in the spring of 1939; 14 were miners, and the rest were scattered chiefly among the skilled, "white collar", and professional occupations. The number coming each year by occupational groups is shown in table 5.

State and county of last previous residence. - Information concerning the State of origin of the migrants gives some insight into the adjustments required in the new location, particularly with respect to type of farming. For the heads of agricultural households, Oklahoma supplied 48 of the 147 new families and Colorado supplied 40; the remainder were scattered among 11 other known States, with only Texas and Kansas having more than 10 families each. The State of origin of heads of agricultural households resident in Dolores County before 1930 showed Colorado leading with 27 of the 103 and Oklahoma second with 25. The remainder had come from 15 States with only Kansas supplying more than 10. Table 6 shows these comparisons.

Table 5. - Heads of households present in 1939 moving into county 1930 and after, by date of moving and present occupation

Year moved	Farm owner	Farm tenant	Farm laborer	Non-agricultural	Total
1930	11	3	--	6	20
1931	8	3	1	6	18
1932	10	4	--	5	19
1933	6	2	--	6	14
1934	7	6	--	5	18
1935	7	7	2	5	21
1936	13	3	--	5	21
1937	15	8	2	33	58
1938	10	8	4	39	61
1939 (through March)	2	3	2	4	11
Total	89	47	11	114	261

Table 6. - Heads of agricultural households present in 1939 by State of origin and present occupation

State of Origin	Moved to county 1930 and after:				Resident before 1930			
	Total	Farm Owner	Farm tenant	Farm laborer	Total	Farm owner	Farm tenant	Farm laborer
Arizona	8	5	1	2	--	--	--	--
Arkansas	3	--	2	1	1	1	--	--
California	4	3	1	--	--	--	--	--
Colorado	40	21	16	3	27	23	4	--
Kansas	11	9	1	1	14	13	1	--
Nebraska	1	--	1	--	1	1	--	--
New Mexico	6	6	--	--	4	4	--	--
Missouri	7	3	4	--	8	8	--	--
Oklahoma	48	25	19	4	25	25	--	--
Texas	12	12	--	--	3	3	--	--
Utah	3	1	2	--	1	1	--	--
Washington	1	1	--	--	1	1	--	--
Wyoming	1	1	--	--	1	1	--	--
Illinois	--	--	--	--	1	1	--	--
Louisiana	--	--	--	--	1	1	--	--
Montana	--	--	--	--	1	1	--	--
North Carolina	--	--	--	--	3	3	--	--
Pennsylvania	--	--	--	--	2	1	1	--
Virginia	--	--	--	--	1	1	--	--
Unknown	2	2	--	--	8	7	1	--
Total	147	89	47	11	103	96	7	--

It may be considered significant that 21 out of the 40 heads of "new" families now engaged in agriculture who came from Colorado were from the adjoining county of Montezuma, while 6 others came from adjoining or nearby counties.

Of the 224 heads of families, both old and new, that were not engaged in agriculture 89 came from Colorado, with Oklahoma accounting for 21, a very poor second. Most of those from Colorado were from nearby counties, 39 coming from the two adjoining counties of Montezuma and San Miguel.

Number returning to Dolores County. - Previous residence in the county might well facilitate adjustment of migrants and might also help to explain why they chose Dolores County when moving from the last previous residence. Only 40 of the 261 "new" households had ever lived in the county before; 20 of the 89 farm owners, 7 of the 47 tenants, and 13 of the 125 others stated they had previously lived in this county. Thus only one in five of the new farm operators was likely to have been familiar with the agricultural conditions of Dolores County before starting to farm in his new location. Only 11 of the 27 farm operators previously resident in the county had moved out since 1930 and then returned; the other 16 had been gone more than 9 years. The time of last previous residence in the county for those known to be returning is shown in table 7.

Table 7. - Heads of households returning to Dolores County classified by period of last previous residence in county and by occupation

	: Farm owner :	Farm tenant:	All others :	Total
1935 and after	2	2	3	7
1930-1934	6	1	6	13
1925-1929	4	2	3	9
1924 and before	8	2	1	11
Total	20	7	13	40

Occupation before migration. - What was the usual occupation of heads of migrant households before moving to Dolores County? Forty-six were farm owners, 73 were tenants, 14 were farm laborers, and 128 were in other classifications. This shows that the majority of the newcomers who had been running a farm were tenants (61.3 percent). Data collected on State of origin of migrants by usual instead of present occupation indicate that of the 133 reporting

agriculture as a usual occupation, 42 came from Oklahoma, 38 from Colorado, and 12 from Missouri, no other State accounting for more than 8. Of 129 reporting a usual occupation other than agriculture, 63 were from Colorado, 21 from Oklahoma, and not more than 7 from any other single State.

Occupational shifts after moving. - Do heads of households have the same occupation in Dolores County that they had before moving? Has the change resulted in improved status? The data indicate that there has been a considerable amount of occupational shifting. Less than half of the newcomers (46.4 percent) reported the same occupation in 1939 in Dolores County as the one usually followed before moving. Of the 46 who had been farm owners, only 27 now owned farms; 6 had dropped to tenant status and one to that of laborer. On the other hand, 62 persons not classified as owners prior to moving had achieved this status by 1939. For the 73 who had been farm tenants, 28 were still tenants but another 28 had climbed to ownership, while 4 were now laborers. The total number of tenants in the migrant group in 1939 was only 47. Former farm laborers had also improved their economic status; 4 of the 14 were now owners, one was a tenant, and 4 remained laborers. Of the 108 in known nonagricultural jobs previous to moving, 61 were still in the same general class although not necessarily in exactly the same occupation. The nature of occupational shifts is shown in detail in table 8.

Table 8. - Heads of households moving to Dolores County during or since 1930 classified by usual occupation prior to moving and by present occupation

Usual occupation: prior to moving	Present occupation						
	Farm owner	Farm tenant	Farm laborer	Unemployed	Other	Unknown	
Total	261	89	47	11	13	97	4
Farm owner	46	27	6	1	3	9	0
Farm tenant	73	28	28	4	1	12	0
Farm laborer	14	4	1	4	2	3	0
Unemployed	4	2	1	0	1	0	0
Other	108	26	10	2	5	61	4
Unknown	16	2	1	0	1	12	0

It may be of some significance that almost one-third (30.9 percent) of the newcomers who established themselves as farm operators did not report agriculture as their usual occupation before moving to Dolores County. Of the 89 in the group who were owners

in 1939, only 27 had previously been owners and 28 had usually been engaged in nonagricultural employment. Eleven of the 47 tenants reported themselves to have been usually employed in nonagricultural jobs before moving to Dolores County.

One out of every four who had been a farm operator before coming to the county was not running a farm in the spring of 1939. Whether this reflects a displacement of these farm operators, a lack of available farms for those who decided to move to a new location, or a voluntary shift of occupation cannot be definitely said. It is perhaps equally significant that a still larger proportion (more than one out of every three) of those who were not farm operators prior to moving were so classified in 1939.

Size of farm. - Farms operated by families coming into the county during or since 1930 are definitely smaller than the average farm in the county. The average size of all farms in the county was 368 acres in 1930 and 351 acres in 1935, but the newcomers reporting size of farm averaged only 209 acres. Census figures for both 1930 and 1935 showed more farms in the 260 to 499 acre group than in any other but the farms of the new operators were most frequently between 100 and 175 acres, mostly 160's. These comparisons are given in detail in table 9.

Table 9. - Distribution of farms of known size for Dolores County, 1930 and 1935, and for "new" farmers moving to the county during or since 1930 who were present in 1939

	Dolores County				"New" farmers only	
	1930 /1		1935 /2		1939 /3	
Acres in farm	Number	Percent	Number	Percent	Number	Percent
Under 50	7	4.6	5	1.9	7	6.2
50-99	5	3.4	15	5.8	14	12.5
100-174	31	20.8	67	26.1	49	43.8
175-259	12	8.1	18	7.0	9	8.0
260-499	60	40.3	103	40.1	27	24.1
500 and over	34	22.8	49	19.1	6	5.4
Total	149	100.0	257	100.0	112	100.0
Average acres	368		351		209	

- /1 U. S. Census, 1930
/2 U. S. Census of Agriculture, 1935
/3 Data from 1939 county survey

There was very little difference in the average size of farm as between the new owners and tenants, the average for the owners being 209 acres and for the tenants 208 acres.

Family size. - Families moving into the county during or after 1930 were larger than those reporting themselves as living here since a date earlier than 1930. The average for the newcomers was 4 persons as compared with 3.4 persons for the nonmigrants. The new farm owner families averaged 4.2 persons as compared with 3.8 for the older resident owners, while the new tenants averaged 4.9 as compared with 3.0 for the old tenants. For the nonagricultural families the average size of the migrant families was 3.5 persons as compared with 3 persons for the nonmigrant group. The group whose date of moving was unknown had an average family size smaller than that for those definitely known to have moved into the county during or since 1930 and larger than for those present before 1930.

Sex ratio. - No change occurred in the ratio of males to females between 1930 and 1939 for the total population; nor was there much difference in sex ratios between the migrant and non-migrant agricultural population. However, the new nonagricultural population was evenly balanced between males and females whereas the nonmigrants had more males than females. This situation probably reflects the influence of employment in the mines in the eastern portion of the county.

Age. - Analysis of their age composition and comparison with that of the nonmigrant people in the county shows that the migrants were a relatively youthful group. The migrants had a larger proportion of people in each age group under 35 while the older residents had a larger proportion in each age group over 35; the comparison also holds true for each sex. These findings are in agreement with those reported above concerning family size.

The proportion of children under 15 was 36.6 percent for the newcomers and 30.8 percent for the nonmigrants; 20.9 percent of the migrants were youths, aged 15-24, but only 15.8 percent of the nonmigrants were in this category. Persons aged 65 and over made up 9.2 percent of those resident in the county before 1930 but only 1.3 percent of the newcomers. Males of working age, 15-64, composed one-third of each group. The detailed comparisons of the age and sex percentage distribution are shown in table 10.

Table 10. - Percentage distribution of old and new residents of Dolores County by age and sex

Age groups	Males		Females		Total	
	New	Old	New	Old	New	Old
Under 5	6.9	5.2	6.8	3.2	13.7	8.4
5-14	11.7	10.9	11.2	11.5	22.9	22.4
15-24	11.1	8.6	9.8	7.2	20.9	15.8
25-34	8.5	6.1	9.7	4.1	18.2	10.2
35-44	5.4	6.8	4.0	6.6	9.4	13.4
45-64	8.2	12.2	5.4	8.4	13.6	20.6
65 and over	0.9	5.2	0.4	4.0	1.3	9.2
Total percent	52.7	55.0	47.3	45.0	100.0	100.0

"Old" includes those enumerated in 1939 that were resident in the county before 1930.

"New" includes persons in households enumerated in 1939 that came into the county in 1930 and after.

When the old and the new population are compared within occupational groups, the new are found to have more young people and fewer aged. However, for farm owners and nonagricultural occupations (the only two groups containing enough persons for statistically reliable comparisons) the new had a slightly smaller ratio of males of working age, as shown in table 11.

Table 11. - Percentage distribution of old and new residents by selected age groups and by occupation

Age groups	Occupation			
	Farm owners		Nonagricultural workers	
	New	Old	New	Old
Children under 15	35.9	32.0	37.5	28.7
Youth 15-24	22.6	16.8	16.0	13.3
Aged 65 and over	0.9	6.7	1.6	13.2
Males 15-64	32.3	34.0	32.3	34.3

Another indication that the newcomers to the county are a younger group than the long-time residents may be seen from the age distribution of the heads of households engaged in agriculture.

The average new farm operator is almost five years younger than the average nonmigrant, or 43 as compared with 47.8 years. One in three of the new operators of known age was under 35 as compared with one in five of the operators resident in the county before 1930. The new farm laborers who were heads of households averaged 37.5 years of age. Table 12 shows the number of household heads who were farm operators in each age group by tenure status and compares the migrants with the older residents.

Table 12. - Age distribution of old and new heads of households engaged in agriculture, by tenure status

Age	Tenure					
	Farm owners ^{1/}		Farm Tenants ^{2/}		Farm laborers	
	New	Old	New	Old	New	Old
Under 25	8	4	2	0	1	--
24-34	17	15	14	3	5	--
35-44	19	20	7	2	2	--
45-54	24	25	13	0	2	--
55-64	12	17	5	0	1	--
65 and over	2	13	3	2	0	--
Not known	7	2	3	0	0	--
Total number	89	96	47	7	11	--
Average age	42.8	48.1	43.3	44.3	37.5	--

^{1/} Date of moving into county not known for 11 farm owners.

^{2/} Date of moving into county not known for 3 farm tenants.

The Migrants Out

The age and sex characteristics of the population leaving the county between 1930 and 1939 may be estimated as being the difference between those present in 1930 and those present in 1939 who were also resident at the time of the 1930 Census (taking deaths into account). Between 774 and 940 of the total of 1,412 persons who were resident in 1930 were not present by 1939.

Males and females left the county in almost identical proportions. Between 54.3 and 66.6 percent of the males and between 55.4 and 66.4 percent of the females reported in 1930 were not in the county by 1939; the larger percentage in each case is secured by assuming that all those present in 1939 for whom the year of coming to the county was unreported came after

the 1930 Census, while the smaller percentage is secured by assuming that all this group came before 1930. The actual percentage is somewhere within the estimated range.

Similarly, for the farm population alone both males and females left the county in equal proportions; between 48.5 and 57.0 percent of the males and between 50.9 and 56.6 percent of the females of 1930 not being reported in 1939.

Persons between 15 and 24 in 1930, the youth group, left in greater proportion than any other group, as between 65.6 and 76.1 percent were not reported by the enumeration in 1939. For the other age groups in the population of 1930, the percentage of departures by 1939 were within the following ranges: under 15, from 58.7 to 67.5 percent; aged 5 to 14, from 60.9 to 68.7 percent; 25 to 34, from 52.8 to 64.6 percent; 35 and over, from 59.7 to 67.8 percent. It is usually found that mobility decreases with the increase in age after the youth period. The data from Dolores County appear to lend some support to this generalization, particularly if it is noted that losses by death have not been separated in these calculations. If this were done the percentage of departures in the oldest age group would no doubt be considerably reduced.

The youth group in the farm population of 1930 also had the greatest loss by migration of any age group during the following 9 years, this figure being between 64.7 and 70.7 percent. Those 55 and over showed a loss of between 67.1 and 68.2 percent, partially reflecting the expected high mortality rates of the older ages. The group aged 5 to 14 lost between 56.9 and 61.7 percent; those 25 to 34 lost only 38.6 to 50.5 percent; and those 35 to 54 decreased between 46.2 and 54.4 percent.

Net Effects of Migration, 1930-1939

It should be remembered that this study does not provide a complete picture of the extent of migration into and out of the county between 1930-1939, nor of the characteristics of such migrants. It is necessarily limited, in the main, to those migrants who came into the county after 1929 and remained until 1939.

Some of the net effects of the inflow of people upon the population composition of Dolores County have already been noted, such as the increase in relative numbers of children and youth

and the decrease in the aged persons and in males of working age. In addition, it may be said that from 1930 to 1939 the fertility rate or the ratio of children to women showed a slight decrease from 569 children under 5 to 1,000 women aged 15-44, to 557. This, however, may well be a reflection of the national trend toward lower birth rates rather than a direct consequence of the movement of population into the county. The comparison of age of the migrant and nonmigrant heads of agricultural households revealed the newcomers to have an average younger age. For all farm operators the average age was 45.3; for owners, 45.9; for tenants, 43.2. Farm laborers averaged 37.5. The number of owners and tenants within the major age groups for which definite information was obtained are shown in the following table:

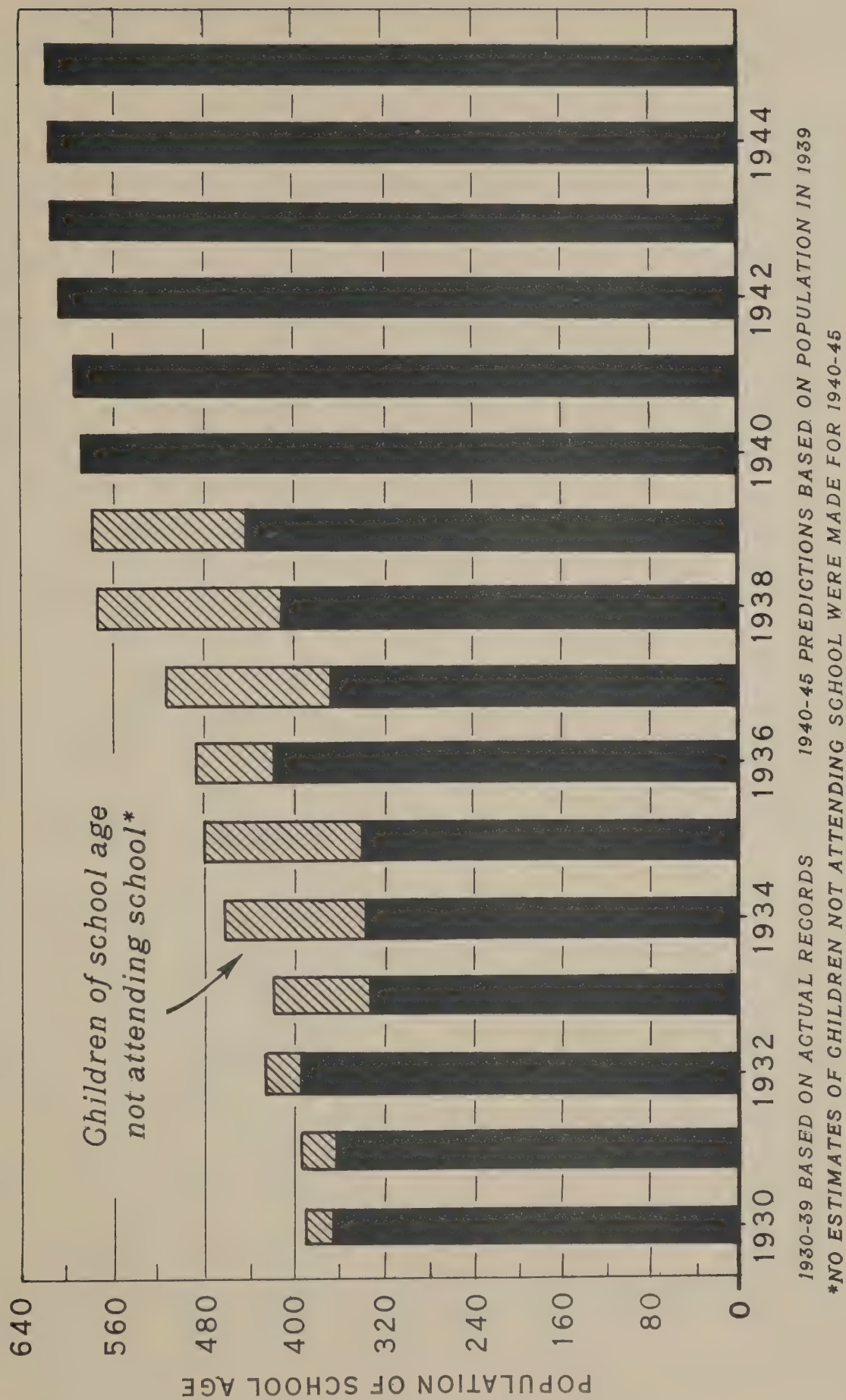
Table 13. - Age of household heads who were farm owners or farm tenants in 1939

Age	:	Farm owner	:	Farm tenant
Under 25		12		2
25 to 34		34		18
35 to 44		41		10
45 to 54		51		14
55 to 64		33		5
65 and over		16		5
Not known		9		3
Total		196		57

Trends in School Census and Enrollment

School census data for Dolores County since 1930 definitely reflect the increase in population through migration. The number of children of school age, 6-20 inclusive, has increased from 391 to 581, or 48.6 percent, during the period from 1930 to 1939. The number of children in school has fluctuated more than the number of children of school age, but for the county as a whole enrollment has tended to increase. (Fig. 2) When an attempt is made to predict what the probable number of children of school age will be each year in the future through 1945, assuming no migration in or out, it may be seen that although a small increase can be expected on the basis of children already born, the extent of migration

POPULATION OF SCHOOL AGE (6-20 YEARS INCLUSIVE), FOR ALL DISTRICTS OF DOLORES COUNTY, COLORADO



in or out of the county will be the chief factor accounting for an increase or decrease of children from the present numbers.

When each district within the county is considered separately, different trends are revealed in some instances. Careful study of table 14 will show, for example, that on the basis of the present population, District No. 1, Rico, can expect a considerable gain in children aged 6-20 by 1945 as is also true of District No. 9, Cahone. District 4, Dove Creek, will apparently not show any increase during the next 6 years but will level off at the present high point. Most of the remainder of the districts may be expected to continue at about the present number, which is generally below some of the high points since 1930. It must be remembered that all projections for the next 6 years do not and cannot consider the influence of the movement into or out of the districts by families with children. In very small districts the influence of one or two families with a large number of children is relatively great.

The number of children aged 6-20 inclusive as reported by the school census for years since 1930 and as predicted through 1945 on the basis of children already born is shown for each district separately in table 14.

The enrollment figures for each district are shown in table 15. It should be remembered that children may be resident in one district and enrolled in another. Enrollment figures for the earlier years are likely to be more accurate than school census records; however, enrollment figures may reflect not only population changes but also a tendency for more children to continue attending school for a longer period than formerly.

School revenue. - While this tremendous increase in school-age children has been taking place, the taxable wealth of the county available to support the schools has suffered a great decline, dropping from \$1,877,958 in 1930 to \$1,240,833 in 1938, or a 33.9 percent decline. The lowest point in valuation of property on the tax rolls was in 1933 when it dropped to \$1,033,160. The total revenue available to operate the schools has followed about the same general trend as valuations, dropping from \$25,999 in 1930 to \$19,975 in 1938; this \$6,024 decline was a 23.2 percent drop as compared with the decline of almost 34.0 percent in property values. This meant that the millage levy for school purposes had to be increased for most of the districts. The low point in school revenues was also reached in 1933. Table 16 shows the tax data with respect to schools for the county as a whole.^{3/}

^{3/} Charts and tables showing assessed valuations, levies, and revenues for each district have been supplied to the county superintendent of schools for the use of all interested persons.

Table 14. - Trends in school population of Dolores County by district 1930-39 and predicted trends for 1940-45

		District number										
Year:	Total:	1	2	3	4	5	6	7	8	9	10	11
1930	391	93	37	22	108	33	22	25	25	12	14	
1931	396	63	33	15	129	39	35	15	25	23	19	
1932	425	67	29	11	158	41	30	19	28	22	20	
1933	418	54	33	11	150	34	32	31	27	31	15	
1934	458	51	75	6	157	33	27	22	17	53	17	
1935	451	60	37	7	168	40	24	14	19	49	13	
1936	488	64	33	11	184	42	27	18	16	43	21	29
1937	501	53	16	14	223	40	14	19	17	48	31	26
1938	576	73	22	12	236	55	20	28	12	54	30	34
1939	581	83	19	8	254	57	17	18	10	62	26	27
1940	583	88	17	8	249	57	17	15	10	68	25	29
1941	591	92	15	8	245	56	18	18	8	73	29	29
1942	607	98	16	9	252	56	21	16	8	72	30	29
1943	615	105	17	8	256	49	21	16	8	75	30	30
1944	616	110	16	9	249	52	20	15	8	80	30	27
1945	620	117	17	10	240	57	21	15	8	80	29	26
Year												
organized	1881	1893	1899	1912	1916	1919	1920	1923	1929	1927	1935	

Table 15. - Trends in school enrollment for Dolores County by district, 1930-39

		District number										
Year:	Total:	1	2	3	4	5	6	7	8	9	10	11
1930	374	65	17	17	132	23	54	14	23	17	12	
1931	362	63	20	10	154	27	20	15	20	22	11	
1932	395	75	20	10	175	27	20	15	19	22	12	
1933	337	39	29	11	143	20	23	12	25	24	11	
1934	337	47	38	11	115	30	23	11	14	39	9	
1935	380	59	41	11	142	30	23	11	14	39	10	
1936	415	50	16	7	174	27	32	11	12	37	20	29
1937	374	36	12	14	155	26	12	13	14	47	20	25
1938	418	52	12	16	168	31	28	15	14	43	17	22
1939	445	63	12	8	188	38	21	12	10	44	21	28

Table 16. - Total property valuation, source and amount of school revenues in Dolores County, 1930 - 1938

Year	: Total : Valuation	: Source of revenue		
		: 5-mill county: : general levy	: Special dis- : trict levy	: Total school : revenue
1930	\$1,877,958	\$9,389.79	\$16,609.70	\$25,999.49
1931	1,511,531	7,557.66	12,944.27	20,501.93
1932	1,270,075	6,350.38	11,277.81	17,628.19
1933	1,033,160	5,165.80	9,211.49	14,377.29
1934	1,059,105	5,295.52	9,181.27	14,476.79
1935	1,069,095	5,345.48	9,383.37	14,728.85
1936	1,176,480	5,882.40	11,659.46	17,541.86
1937	1,166,235	5,831.18	12,700.50	18,531.68
1938	1,240,833	6,204.17	13,770.69	19,974.86

Standards of Living

Although no specific information was gathered in this survey concerning the cost of living for any group of families in the county some clue as to standards of living is furnished by the proportion of families having such facilities as electricity, radio, telephone, running water in the home, and automobile. Unfortunately, the 1930 census is the most recent source of information showing the proportion of all families having each of these facilities. According to a composite index based upon the data of 1930, Dolores County at that time had the lowest plane of living for its farm population of any county in Colorado. At that time, only 16.5 percent of the farm homes had telephones, 14.1 percent had radios, 1.6 percent had electricity, one-half of 1.0 percent had running water, and 52.1 percent had automobiles. There is reason to believe that this very crude index of standards of living would show considerable progress during the last 9 years. According to tax assessor's data, for example, the proportion of all families having radios has increased at least two and one-half times since 1930.

As further evidence that the level of living has improved, findings may be cited from a special survey made during 1937 of 183 resident farm operators in the dryland area in the western end of Dolores County and the northeast corner of Montezuma County.^{4/} In this group

^{4/} Present Land Use in the Dove Creek Area of Montezuma and Dolores Counties. Prepared and filed in the office of the State Land Planning Specialist, Fort Collins, Colorado, 1937. (Typewritten).

of farmers, 43.1 percent had radios, 7.7 percent had telephones (this decrease was common in most farm areas of this region), 4.9 percent had electricity (home units), one-half of 1.0 percent had piped water in the house, and 62.8 percent had automobiles. It is worth noting that 39.0 percent of the farmers had to haul the water used for domestic purposes, having neither wells nor springs on their own farms. Over one-fourth found it necessary to haul water for livestock.

Agricultural Trends

Limited data related to the agricultural enterprise of the county are given here to aid in the interpretation of the population statistics. The increase in number of farms from 194 in 1930 to 257 in 1935 and 253 in 1939 has already been noted. The proportion of these farms operated by farm tenants has increased from 15.0 percent in 1930 to 21.8 percent in 1935 and 22.5 percent in 1939, although even yet the proportion of tenant-operated farms is still much below the State average of 39.0 percent reported by the United States Census of 1935.

Land classification. - The land on the tax rolls was classified in 1938 as shown in table 17.

Table 17. - Classification of land in Dolores County by number of acres and average value per acre

Classification of land	: Number of acres	: Average value per acre
Irrigated land	814	\$10.00
Dry-farm land in cultivation	21,580	8.33
Dry-farm land	45,605	3.61
Grazing land	92,258	2.88
Waste and seep land	59,540	1.00
Timber land	1,275	8.50
Nonproducing coal lands	213	10.16
Nonproducing metalliferous mining claims	2,860	36.00

The average assessed value per acre of dry-farm land in cultivation has increased from \$5.40 in 1934 to \$8.33 in 1938.

Cropland. - Because of changes of classification since 1930 it is difficult to interpret acreage data given each year by the assessor's

report. It is rather clear, however, that the acreage of cropland has shown an increase. The 1930 census (reporting for 1929) showed 71,455 acres in farms of which 15,497 acres were in cropland, either harvested, failed, idle or fallow, and 16,943 were available for crops. The 1935 census (reporting for 1934) gave 90,201 acres in farms, of which 18,847 were in cropland and 22,062 were reported available for crops.

Crop trends. - The prevailing type of farming is indicated by the acreage figures for each of the leading crops. In terms of acreage, dry beans now constitute the most important crop, accounting for 13,890 acres or about three-fifths of the cropland in 1938; wheat ranks second with 4,750 acres. Bean production has shown tremendous increases and although wheat acreages have fluctuated, the harvested acreage in 1938 exceeded all past records. There has been a tendency to increase the production of potatoes, whereas the crops for feeding livestock have not changed much. Harvested acreages from 1927 through 1938 are shown in table 18.

Table 18. - Acreage in specified crops in Dolores County, 1927-38

Year	Acreage in specified crops				
	: Dry beans	: Winter wheat	: Spring wheat	: Potatoes	: Corn
1927	210	1,950	1,240	160	2,830
1928	800	1,190	1,670	300	2,300
1929	1,450	1,400	1,580	169	1,730
1930	1,720	1,620	880	180	1,520
1931	1,180	1,010	460	205	1,030
1932	910	1,340	990	334	1,700
1933	3,370	2,260	1,190	496	1,700
1934	2,484	2,591	--	412	1,950
1935	7,600	1,810	1,750	750	2,613
1936	5,110	1,070	410	320	2,380
1937	9,770	3,810	400	530	2,830
1938	13,890	4,070	680	420	2,510

In 1938 the total value of all the major crops was \$238,573 of which beans accounted for \$155,568 and wheat \$41,667.

Livestock - The trend in number of cattle and sheep is shown in table 19. Practically no hogs are produced at present. It will be seen from the table that there have been no significant trends in livestock production during recent years.

It may be noted that the number of milk cows averages only about two per farm.

Table 19. - Cattle and sheep in Dolores County, 1928-38

: Stock sheep :		: Milk cows:	
: (Number assessed April 1) :		: All cattle and calves : (Estimated January 1) :	
Year			Year
1928	--	2,231	440
1929	--	2,345	435
1930	16,761	3,184	435
1931	22,559	3,851	377
1932	21,640	3,782	375
1933	17,074	4,028	494
1934	20,707	4,461	640
1935	20,668	3,518	620
1936	20,289	3,361	476
1937	21,446	4,190	496
1938	23,115	4,137	480

Tractors. - The number of tractors in the county has increased each year since 1930, with the assessed number going from 29 in 1930 to 69 in 1938.

Rainfall. - Only limited rainfall records are available for the county; they were kept at Dove Creek from 1917 to 1921 and have been recorded at Northdale since 1931. The average rainfall for the years for which records are available has been about 14 inches; in 5 out of the 13 years covered by records the rain was below this average. The available data are given in table 20.

Table 20. - Annual rainfall for years for which records are available

Dove Creek		Northdale	
Year	Rainfall	Year	Rainfall
	Inches		Inches
1917	10.78	1931	16.58
1918	12.48	1932	12.23
1919	16.06	1933	13.37
1920	15.59	1934	7.03
1921	17.25	1935	15.58
		1936	15.25
		1937	16.02
		1938	15.67
Average	14.43	Average	13.97

Summaries by School Districts

No attempt is made here to present detailed data for individual school districts similar to those supplied in preceding pages for the county as a whole. Comparable tables have been prepared and deposited with the county superintendent of schools for the use of interested persons. If it is desired to make comparisons with census data by minor civil divisions (precincts), this can be done by combining the data for districts as indicated by the note on figure 1.

A summary table is presented on the following page showing for each district the total number of households and the population classified by occupation and date of moving into Dolores County. Some general comparisons between districts may be made from these statistics.

Table 21. - Summary table of population data for Dolores County by school districts

Population data	District numbers										
	1	2	3	4	5	6	7	8	9	10	11:Total: %
Number households moving into county after 1929	51	3	2	100	22	8	11	4	42	11	7 261 53.5
Number households moving into county before 1930	33	8	0	64	20	3	3	2	16	13	4 166 34.0
Number households whose date of move unknown	41	2	9	4	0	4	0	1	0	0	0 61 12.5
Total number households	125	13	11	168	42	15	14	7	58	24	11 488 100.0
Agricultural population moving into county after 1929	0	12	4	319	87	30	39	13	95	42	7 648 35.7
Nonagricultural population moving into county after 1929	167	0	4	123	3	5	2	2	59	4	26 395 21.7
Agricultural population moving into county before 1930	0	15	0	162	70	7	11	5	49	47	20 386 21.2
Nonagricultural population moving into county before 1930	82	18	0	75	0	0	0	0	6	0	6 187 10.3
Agricultural population whose date of move unknown	0	6	24	12	0	18	0	5	0	0	0 65 3.6
Nonagricultural population whose date of move unknown	124	3	8	2	0	0	0	0	0	0	0 137 7.5
Total agricultural population	0	33	28	493	157	55	50	23	144	89	27 1099 60.5
Total nonagricultural population	373	21	12	200	3	5	2	2	65	4	32 719 39.5
Total population	373	54	40	693	160	60	52	25	209	93	59 1818 100.0

